

S100A1 Recombinant monoclonal antibody

Catalog Number: 88164-1-RR

Basic Information

Catalog Number: 88164-1-RR	GenBank Accession Number: BC014392	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 6271	CloneNo.: 252961A11
Isotype: IgG	UNIPROT ID: P23297	Recommended Dilutions: WB: 1:2000-1:10000 IHC: 1:250-1:1000 IF/ICC: 1:200-1:800
Immunogen Catalog Number: AG8871	Full Name: S100 calcium binding protein A1	
	Calculated MW: 94 aa, 11 kDa	
	Observed MW: 10 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, mouse	WB : mouse heart tissue, human heart tissue
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC : human tonsillitis tissue,
	IF/ICC : A375 cells,

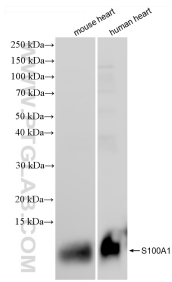
Background Information

S100A1 belongs to the S100 protein family, which represents the largest group among EF-hand Ca²⁺-binding proteins exclusively expressed in vertebrates. S100 proteins have been described as central regulators of numerous cellular and molecular processes, often operating in a cell-type-specific manner (PMID: 11991838). S100A1 is a central regulator of Ca²⁺-driven networks that orchestrates compartmentalized Ca²⁺ fluxes in the heart (PMID: 22336719, PMID: 26021637). S100A1 is primarily expressed in cardiomyocytes (CM). Endothelial cells (EC) express significantly lower S100A1 levels, whereas fibroblasts do not express S100A1 (PMID: 38641766).

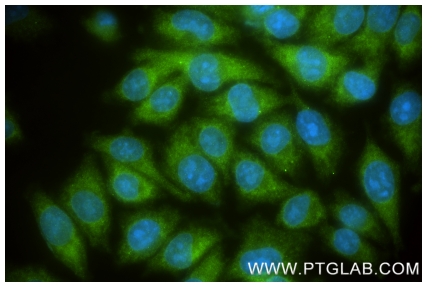
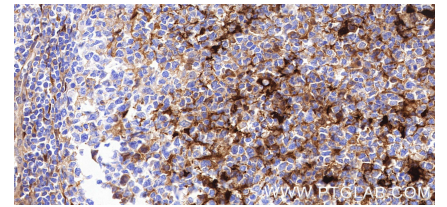
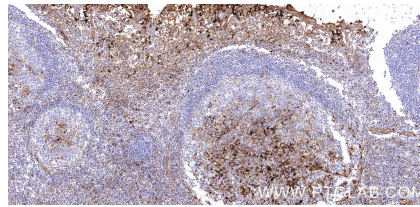
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 88164-1-RR (S100A1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed A375 cells using S100A1 antibody (88164-1-RR, Clone: 252961A11) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).